

ABSTRACT

A method and apparatus for providing an early warning of thermal decay in magnetic storage media are provided. In accordance with an embodiment of the present invention, a test pattern that is particularly susceptible to thermal decay is written to a disk. The test pattern is then read, and the amplitude of the signal produced by the test pattern is stored. When testing for thermal decay is desired, the test pattern is again read, and the amplitude of the signal produced in the channel is compared to the stored amplitude. If the later amplitude is less than the stored amplitude by at least a predetermined amount, a thermal decay warning signal is generated. In accordance with another embodiment of the present invention, a test pattern is written to a portion of a disk that has been identified as being particularly susceptible to thermal decay. The amplitude produced by the test pattern is then stored so that it can later be compared to an observed amplitude when testing for thermal decay. The present invention allows remedial measures to ensure the integrity of data to be taken before data loss due to thermal decay can occur.